UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,273	12/02/2003	Michael A. Czayka	200047.161	3388
	7590 02/08/2007 CD & PARKS IIP		EXAM	INER
HAHN LOESER & PARKS, LLP One GOJO Plaza			YOON, TAE H	
Suite 300 AKRON, OH 44311-1076			ART UNIT	PAPER NUMBER
			1714	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVER	Y MODE
3 MO	NTHS	02/08/2007	ELECT	RONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/08/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@hahnlaw.com akron-docket@hotmail.com

<u>L</u>	/	/

	Application No.	Applicant(s)	<del> </del>
	10/726,273	CZAYKA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Tae H. Yoon	1714	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (6(a). In no event, however, may a reply be tim (ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	J. lely filed the mailing date of this communic O (35 U.S.C. § 133).	,
Status			
1) Responsive to communication(s) filed on 29 Ja	nuary 2007.		
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	action is non-final.		
3) Since this application is in condition for allowan	•		s is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-16,19 and 20</u> is/are pending in the a	pplication.		
4a) Of the above claim(s) is/are withdraw	vn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-16,19 and 20</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	election requirement.		
Application Papers			
9) The specification is objected to by the Examine	г.		
10)☐ The drawing(s) filed on _ · _ is/are: a)☐ acce	epted or b) $\square$ objected to by the $\mathfrak k$	Examiner.	
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.12	<u>?</u> 1(d).
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152	2.
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority documents			
2. Certified copies of the priority documents	• •		
3. Copies of the certified copies of the prior	•	d in this National Stage	
application from the International Bureau			
* See the attached detailed Office action for a list of	or the certified copies not receive	α.	
Attachment(s)			

## 1) Notice of References Cited (PTO-892)

ועבשו (יי	Notice of References Cited (1 10-032)
2) 🗌	Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date \_\_\_\_\_.

4) 🔲	Interview Summary (PTO-413)
·	Paper No(s)/Mail Date
5) 🔲	Notice of Informal Patent Application

~ `	 O4L
ום	 Other:

Application/Control Number: 10/726,273

Art Unit: 1714

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5-9, 15, 16, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Parker, Jr. (US 3,429,950).

Rejection is maintained for reason of record with following response.

Applicant assets that B-stage of Parker, Jr is not partially crosslinked, but the examiner disagrees with such assertion since applicant's claim 15 recites a gel material and Parker, Jr teaches B-stage polyesters being between the gel point and the fully cured state as pointed out by applicant. Thus, said B-stage polyesters of Parker, Jr. are inherently partially crosslinked. Again, with respect to an electron beam irradiation, an invention in a product-by-process is a product, not a process. See *In re Brown*, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and *In re Thorpe*, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985).

With respect to "consisting essentially of " in new claims 19 and 20, the recitation of "consisting essentially of" alone cannot overcome the rejection based on the art

Application/Control Number: 10/726,273

Art Unit: 1714

reciting "comprising". See *In re De Lajarte*, 337 F2d 870, 143 USPQ 256 (CCPA, 1964); When applicant contends that modifying components in the reference composition are excluded by the recitation of "consisting essentially of", applicant has the burden of showing the basic and novel characteristics of his composition – i.e. a showing that the introduction of these components would materially change characteristics of applicant's invention. Applicant failed to show that the presence a inhibitor is detrimental to the invention.

Claims 1, 5-9, 15, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as obvious over Parker, Jr. (US 3,429,950) in view of Parker, Jr. (US 3,300,544), JP 54120675 A or JP401251791 A.

Parker, Jr. (US '544) teaches that B-stage is a partially crosslinked at col. 2, lines 18-29, and abstracts of JPs teach the same. Parker, Jr. (US '544) is also an inventor for the primary reference, US'950.

Thus, the cited secondary references support the examiner's position in above anticipation rejection, orit it would be obvious to one skilled in the art at the time of invention to crosslink the unsaturated polyester of Parker, Jr. (US'950) with teaching of the secondary references since all teach B-stage polyester absent showing otherwise.

Claims 1, 5-9, 15, 16, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lane et al (US 5,985,785).

Application/Control Number: 10/726,273

Art Unit: 1714

Rejection is maintained for reason of record with above response for anticipation under Parker, Jr.

The presence of metal does not inhibit partial crosslinking of polyester in B-stage since unsaturated vinyl groups are crosslinked.

Claims 1-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as obvious over Parker, Jr. (US 3,429,950) in view of Mathur et al (US 6,063,864) or Lane et al (US 5,985,785) or JP 54120675 A.

Parker, Jr. teaches partially crosslinked B-stage polyesters.

The invention further recites irradiation with high-energy electrons over the heat polymerization (partial curing) of Parker, Jr. However, the use of electron beam source in curing unsaturated polyester is well known as taught by Mathur et al, col. 2, line16-17 and col. 3, lines 40-45 and Lane et al, col. 8, lines 34-35. Both Mathur et al and Lane et al teach and equate various polymerization (or crosslinking) methods such as heat, UV radiation and electron beam. Furthermore, Lane et al teach that one can adjust dosage conditions at bottom of col. 8.

JP teaches the use of irradiation in parital curing (crosslinking) of polyester (B-stage) in abstract.

It would have been obvious to one skilled in the art at the time of invention to utilize the electron beam source taught by Mathur et al or Lane et al or JP in Parker, Jr. since irradiation with high energy electrons is well known in curing unsaturated polyester and since Mathur et al and Lane et al teach and equate various

Art Unit: 1714

polymerization (or crosslinking) methods such as heat, UV radiation and electron beam and since choosing any one method would be an obvious choice and since JP teaches the use of irradiation in parital curing (crosslinking) of polyester (B-stage) and since one would know how to adjust the dosage of irradiation in order to obtain a partially cured polyester absent showing otherwise..

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tae H Yoon / Primary Examiner

Art Unit 1714

THY/February 5, 2007